

Amendments to the Claims:

Please cancel claims 1-81. Please add new claims 82-119. The claims and their status are shown below.

1-81. (Canceled)

82. (New) A mammalian cell comprising an isolated first strand of RNA of 15 to 30 nucleotides in length, and an isolated second strand of RNA of 15 to 30 nucleotides in length, wherein the first strand comprises a sequence that is complementary to a nucleotide sequence of a Huntington's Disease gene, wherein at least 12 nucleotides of the first and second strands are complementary to each other and form a small interfering RNA (siRNA) duplex under physiological conditions, and wherein the siRNA silences the expression of the Huntington's Disease gene in the cell.

83. (New) The mammalian cell of claim 82, wherein the duplex is between 15 and 25 base pairs in length.

84. (New) The mammalian cell of claim 82, wherein the first and/or second strand further comprise an overhang region.

85. (New) The mammalian cell of claim 82, wherein the first and/or second strand further comprises a 3' overhang region, a 5' overhang region, or both 3' and 5' overhang regions.

86. (New) The mammalian cell of claim 84, wherein the overhang region is from 1 to 10 nucleotides in length.

87. (New) The mammalian cell of claim 82, wherein the first strand and the second strand are operably linked by means of an RNA loop strand to form a hairpin structure comprising a duplex structure and a loop structure.

88. (New) The mammalian cell of claim 87, wherein the loop structure contains from 4 to 10 nucleotides.

89. (New) The mammalian cell of claim 87, wherein the loop structure contains 4, 5 or 6 nucleotides.

90. (New) A mammalian cell comprising an expression cassette encoding an isolated first strand of RNA of 15 to 30 nucleotides in length, and an isolated second strand of RNA of 15 to 30 nucleotides in length, wherein the first strand comprises a sequence that is complementary to nucleotides of a Huntington's Disease gene, wherein at least 12 nucleotides of the first and second strands are complementary to each other and form a small interfering RNA (siRNA) duplex under physiological conditions, and wherein the siRNA silences the expression of the Huntington's Disease gene in the cell.

91. (New) The mammalian cell of claim 90, wherein the expression cassette further comprises a promoter.

92. (New) The mammalian cell of claim 91, wherein the promoter is a regulatable promoter.

93. (New) The mammalian cell of claim 91, wherein the promoter is a constitutive promoter.

94. (New) The mammalian cell of claim 91, wherein the promoter is a CMV, RSV, pol II or pol III promoter.

95. (New) The mammalian cell of claim 90, wherein the expression cassette further comprises a polyadenylation signal.

96. (New) The mammalian cell of claim 95, wherein the polyadenylation signal is a synthetic minimal polyadenylation signal.

97. (New) The mammalian cell of claim 90, further comprising a marker gene.

98. (New) The mammalian cell of claim 90, wherein the expression cassette is contained in a vector.

99. (New) The mammalian cell of claim 90, wherein the vector is an adenoviral, lentiviral, adeno-associated viral (AAV), poliovirus, HSV, or murine Maloney-based viral vector.

100. (New) The mammalian cell of claim 99, wherein the vector is an AAV vector.

101. (New) A small interfering RNA (siRNA) comprising a first strand of RNA of 15 to 30 nucleotides in length, and a second strand of RNA of 15 to 30 nucleotides in length, wherein the first strand comprises a sequence that is complementary to a nucleotide sequence of a Huntington's Disease gene, wherein at least 12 nucleotides of the first and second strands are complementary to each other and form an siRNA duplex under physiological conditions, wherein the duplex is between 15 and 30 base pairs in length, and wherein the siRNA silences the expression of the Huntington's Disease gene in the cell.

102. (New) The siRNA of claim 101, wherein the duplex is between 19 and 25 base pairs in length.

103. (New) The siRNA of claim 101, wherein the first and/or second strand further comprises an overhang region.

104. (New) The siRNA of claim 101, wherein the first and/or second strand further comprise a 3' overhang region, a 5' overhang region, or both 3' and 5' overhang regions.

105. (New) The siRNA of claim 104, wherein the overhang region is from 1 to 10 nucleotides in length.

106. (New) The siRNA of claim 101, wherein the first strand and the second strand are operably linked by means of an RNA loop strand to form a hairpin structure comprising a duplex structure and a loop structure.

107. (New) The siRNA of claim 106, wherein the loop structure contains from 4 to 10 nucleotides.

108. (New) The siRNA of claim 106, wherein the loop structure contains 4, 5 or 6 nucleotides.

109. (New) A method of performing Huntington's Disease gene silencing in a mammal comprising administering to the mammal an expression cassette comprising a nucleic acid sequence encoding a first strand of RNA of 15 to 30 nucleotides in length, and a second strand of RNA of 15 to 30 nucleotides in length, wherein the first strand comprises a sequence that is complementary to nucleotides of RNA encoded by a Huntington's Disease gene, wherein at least 12 nucleotides of the first and second strands are complementary to each other and form a small interfering RNA (siRNA) duplex under physiological conditions, and wherein the expression of the siRNA from the expression cassette silences the expression of the Huntington's Disease gene in the mammal.

110. (New) The method of claim 109, wherein the expression cassette further comprises a promoter.

111. (New) The method of claim 110, wherein the promoter is a regulatable promoter.

112. (New) The method of claim 110, wherein the promoter is a constitutive promoter.

113. (New) The method of claim 110, wherein the promoter is a CMV, RSV, pol II or pol III promoter.

114. (New) The method of claim 109, wherein the expression cassette further comprises a polyadenylation signal.

115. (New) The method of claim 114, wherein the polyadenylation signal is a synthetic minimal polyadenylation signal.

116. (New) The method of claim 109, wherein the expression cassette further comprises a marker gene.

117. (New) The method of claim 109, wherein the expression cassette is contained in a viral vector.

118. (New) The method of claim 117, wherein the viral vector is an adenoviral, lentiviral, adeno-associated viral (AAV), poliovirus, HSV, or murine Maloney-based viral vector.

119. (New) The method of claim 118, wherein the vector is an AAV vector.